



## Kronična mijeloična leukemija

### JESMO LI SPREMNI ZA ERU BEZ LIJEČENJA U KRONIČNOJ MIJELOIČNOJ LEUKEMIJI? SERIJA SLUČAJEVA

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**Ključne riječi:** Kronična mijeloična leukemija, inhibitori tirozin kinaze, TFR,

**Uvod:** Povijesno gledano kronična mijeloična leukemija (CML) je bila smrtonosna bolest u kojoj je jedino alogeneična transplantacija bila kurativna opcija. Pivotalna IRIS studija je promijenila ishode ovih bolesnika s uvođenjem imatiniba, inhibitora tirozin kinaze (TKI). S razvojem liječenja CML-a, u ovo područje implementirani su TKI druge i treće generacije. S obzirom da je CML postala kronična bolest s preživljenjem sličnim općoj populaciji, iz multiplih razloga pojavilo se pitanje da li ovi bolesnici mogu biti uspješno praćeni bez samog liječenja (TFR prema engleskom „treatment-free remission“). Postoje multiple studije u ovom području (STIM, ENE-STfreedom, DADI) koje su pokazale da je TFR iznosi oko 50% s platom u krivulji. Bitno je za naglasiti da u slučaju gubitka odgovora, ovi bolesnici s uvođenjem TKI-a postižu adekvatan odgovor.

**Cilj:** Cilj ove serije slučajeva je bio definirati koji su bolesnici kandidati za ovu praksu u jednom centru.

**Metode:** Elektronički smo pretražili sve bolesnike koji boluju od CML-a. Kao kriterij za TFR strategiju koristili smo NCCN smjernice koje preporučaju pokušaj prestanak terapije TKI-om u bolesnika s dubokim molekularnim odgovorom definiranim kao MR4.0 u trajanju od 2 godine uz korišten TKI minimalno kroz tri godine. ELN smjernice nismo koristili jer u trenutku rada, one još nisu bile publicirane.

**Rezultati:** U našem se centru liječi 52 bolesnika u periodu od 1998. i 2019. godine. Većina bolesnika nisu kandidati za prestanak terapije. Identificirali smo ukupno 6 bolesnika koji su kandidati za ovu strategiju. Troje bolesnika uzima imatinib, dvoje nilotinib dok jedan bolesnik uzima dasatinib. Neki od ovih bolesnika su prestali uzimati TKI terapiju te ćemo njihove ishode prikazati na samom kongresu.

**Zaključak:** TFR strategija je sigurna strategija koja može poboljšati kvalitetu života bolesnika, smanjiti financijski pritisak ove bolesti i kroničnu bolest pretvoriti u funkcionalno izliječene.

### SUCCESSFUL PREGNANCY IN CHRONIC MYELOID LEUKAEMIA PATIENTS

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**Aim:** Treatment success in chronic myeloid leukaemia (CML) with tyrosine kinase inhibitors (TKIs) has shifted long-term management efforts from improving CML-specific survival to improving overall quality of life. Potential TKI embryotoxicity and teratogenicity and disease control upon treatment discontinuation create a dilemma in parenthood planning in female CML patients. We present the course of pregnancy in three patients.

**Case presentations:** A 33-year-old woman was diagnosed with Philadelphia chromosome-positive (Ph+) CML in 2008 and had maintained MR5 with imatinib for 10 years. Imatinib was intentionally stopped in January 2019 for pregnancy planning. QT-PCR and a complete blood count (CBC) were performed monthly. She became

pregnant in May 2019 and was started on interferon-alpha (IFNa) following an upsurge in BCR-ABL1/ABL1(IS)>0.01% at 12 weeks' gestation. She delivered a healthy infant via spontaneous vaginal delivery at 39 weeks, re-started imatinib and underwent ablactation. A 29-year-old woman with Ph+ CML since 2004 treated with imatinib became pregnant in October 2019. Imatinib was stopped 4 weeks after the first day of her last menstrual period (LMP) and MR4.5 was maintained throughout the pregnancy. She gave birth via spontaneous vaginal delivery at 38 weeks. The infant had neonatal jaundice but is otherwise healthy. She is breastfeeding and maintains MR4.5 treatment-free. A 29-year-old woman who was diagnosed with Ph+ CML in 2006 with poor disease control, side effects and compliance issues with all TKI generations except original imatinib (Glivec) stopped treatment in December 2019 for an unplanned pregnancy, 5 weeks after her LMP. She maintained only complete haematological response (CHR) at the time, was followed-up with weekly CBCs and was started on IFNa at 9 weeks' gestation. In week 19 IFNa was stopped and imatinib re-started after a haematoma at IFNa application site. She currently maintains complete cytogenetic response; her anomaly scan and regular obstetrical follow-up are unremarkable.

**Conclusion:** Treatment-free remission before pregnancy is recommended since insufficient experience with embryo-fetal exposure to TKIs discourage their use during gestation. If necessary, BCR-ABL1 levels can be safely controlled with IFNa. An individualized approach with close haematological and obstetrical follow-up and careful screening for fetal anomalies is essential for optimal outcomes.